

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

MICROSOFT CORPORATION

Attention: Sharon Rydberg (sharonr-21-2029) LCA,
International Patent Department One Microsoft Way, 21/2029
Redmond Washington 98052-6399 USA

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **27 NOVEMBER 2007 (27.11.2007)**

Applicant's or agent's file reference
315650.02 WO

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/US2007/012573

International filing date (day/month/year)

25 MAY 2007 (25.05.2007)

Priority date(day/month/year)

01 JUNE 2006 (01.06.2006)

International Patent Classification (IPC) or both national classification and IPC

G06F 17/00(2006.01)i

Applicant

MICROSOFT CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon
302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Date of completion of this opinion

27 NOVEMBER 2007 (27.11.2007)

Authorized officer

YU, Jin Tae

Telephone No. 82-42-481-8542



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2007/012573

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of :
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in electronic form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 20	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1 - 20	NO
Industrial applicability (IA)	Claims	1 - 20	YES
	Claims	None	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 5461708 A (KAHN, P. R.) 24 October 1995

D2: US 5581677 A (MYERS, B. A. et al.) 3 December 1996

D1 discloses a system and method for determining the level of complexity present in a user's data and for automatically selecting a preferred graph type based on that determined complexity. The system includes a preferred interface for receiving selections from the user indicating an information set to visualize graphically.

D2 discloses a system and method to automatically produce a display chart from example graphics and data values. A data value is associated with at least one of the graphical elements, and a list of heuristics are applied to determine the visualization characteristics for the graphical elements. The display chart is produced incorporating the visualization characteristics.

1. Novelty

1.1 Claims 1-5

Claim 1 of the present invention relates to a method for formatting chart, comprising: receiving a standard chart, providing a plurality of chart elements, modifying the standard chart, and displaying the modified chart.

D1, which is regarded as the closest prior art to the subject matter of claim 1, discloses a method for automatically formatting a graph based on the contents and layout of user-selected information. But, D1 does not disclose the step of providing a plurality of chart elements pictorially, wherein each of the plurality of chart elements represents a chart modification for use in changing the standard chart. As the step of providing a plurality of chart elements is not disclosed in D1, the method of claim 1 is not anticipated by D1. Therefore, claim 1 seems to be novel and meets the requirements of PCT Article 33(2).

(Continued on the Supplemental Sheet.)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of :

Box V.

Claims 2-5 are dependent on claim 1, and consequently they are also considered to be novel and meet the requirements of PCT Article 33(2).

1.2 Claims 6-8

Claim 6 relates to a system for modifying a chart, the system comprising: a memory storage, a processing unit for modifying the standard chart based on a received input, and a display device.

D1, which is regarded as the closest prior art to the subject matter of claim 6, discloses a system for automatically formatting a graph, comprising: a processor and a memory, a screen device, an input device, a means for automatically selecting different graph types, and means for plotting the information as a graph. But, D1 does not disclose a processing unit for providing a plurality of chart elements pictorially. As the processing unit for providing a plurality of chart elements is not disclosed in D1, the system of claim 6 is not anticipated by D1. Therefore, claim 6 seems to be novel and meets the requirements of PCT Article 33(2).

Claims 7-8 are dependent on claim 6, and consequently they are also considered to be novel and meet the requirements of PCT Article 33(2).

1.3 Claims 9-20

Claim 9 relates to a computer-readable medium which stores a set of instructions which when executed performs a method for modifying a chart, the method comprising: receiving a standard chart, providing a plurality of chart elements, modifying the standard chart, and displaying the modified chart..

D1, which is regarded as the closest prior art to the subject matter of claim 9, discloses a method for automatically formatting a graph based on the contents and layout of user-selected information. But, D1 does not disclose the step of providing a plurality of chart elements pictorially. As the step of providing a plurality of chart elements is not disclosed in D1, the computer-readable medium of claim 9 is not anticipated by D1. Therefore, claim 9 seems to be novel and meets the requirements of PCT Article 33(2).

Claims 10-20 are dependent on claim 9, and consequently they are also considered to be novel and meet the requirements of PCT Article 33(2).

(Continued on the Supplemental Sheet.)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient,
Continuation of :

Box V.

2. Inventive Step

2.1 Claims 1-5

Claim 1 of the present invention relates to a method for formatting chart, comprising: receiving a standard chart, providing a plurality of chart elements, modifying the standard chart, and displaying the modified chart.

D1, which is regarded as the closest prior art to the subject matter of claim 1, discloses a method for automatically formatting a graph based on the contents and layout of user-selected information. The subject matter of claim 1 differs from that of D1 in that claim 1 has the step of providing a plurality of chart elements pictorially. But, D2 discloses a method for displaying a display chart from a drawn example graphical element embodying the visualization characteristic. It would be obvious to a person skilled in the art to combine D1 and D2 to arrive at the method of claim 1. Therefore, claim 1 lacks an inventive step and does not meet the requirements of PCT Article 33(3).

Dependent claims 2-4 relate to a method of claim 1, further comprising the steps of receiving input for selecting chart elements, querying the standard chart, and querying the modified chart. Dependent claim 5 relates to a method of claim 1, wherein the chart elements reside in a chart ribbon. However, claims 2-5 do not have any additional features more than what are described in D1 and D2. A person skilled in the art would regard it as a normal design to combine D1 and D2 to arrive at the method of claims 2-5. Therefore, claims 2-5 lack an inventive step and do not meet the requirements of PCT Article 33(3).

2.2 Claims 6-8

Claim 6 relates to a system for modifying a chart, the system comprising: a memory storage, a processing unit for modifying the standard chart based on a received input, and a display device.

D1, which is regarded as the closest prior art to the subject matter of claim 6, discloses a system for automatically formatting a graph, comprising: a processor and a memory, a screen device, an input device, a means for automatically selecting different graph types, and means for plotting the information as a graph. The subject matter of claim 6 differs from that of D1 in that claim 6 has the processing unit for providing a plurality of chart elements pictorially. But, D2 discloses a programmable data processing system for displaying a display chart from a drawn example graphical element embodying the visualization characteristic. It would be obvious to a person skilled in the art to combine D1 and D2 to arrive at the system of claim 6. Therefore, claim 6 lacks an inventive step and does not meet the requirements of PCT Article 33(3).

(Continued on the Supplemental Sheet.)

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US2007/012573

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of :

Box V.

Dependent claims 7-8 relate to a system of claim 6, wherein the processing unit is associated with a server and a client-side device. However, claims 7-8 do not have any additional features more than what are described in D1 and D2. A person skilled in the art would regard it as a normal design to combine D1 and D2 to arrive at the system of claims 7-8. Therefore, claims 7-8 lack an inventive step and do not meet the requirements of PCT Article 33(3).

2.3 Claims 9-20

Claim 9 relates to a computer-readable medium which stores a set of instructions which when executed performs a method for modifying a chart, the method comprising: receiving a standard chart, providing a plurality of chart elements, modifying the standard chart, and displaying the modified chart..

D1, which is regarded as the closest prior art to the subject matter of claim 9, discloses a method for automatically formatting a graph based on the contents and layout of user-selected information. The subject matter of claim 9 differs from that of D1 in that claim 9 has the step of providing a plurality of chart elements pictorially. But, D2 discloses a method for displaying a display chart from a drawn example graphical element embodying the visualization characteristic. It would be obvious to a person skilled in the art to combine D1 and D2 to arrive at the computer-readable medium of claim 9. Therefore, claim 9 lacks an inventive step and does not meet the requirements of PCT Article 33(3).

Dependent claims 10-12 and 20 relate to a computer-readable medium of claim 9, further comprising modifying the modified chart, receiving input for selecting chart elements, querying the standard chart, and providing art objects. Dependent claims 13-19 relates to a computer-readable medium of claim 9, wherein the plurality of chart elements reside in a chart ribbon, displays a current state of the standard chart, and displays a current state of the modified chart. However, claims 10-20 do not have any additional features more than what are described in D1 and D2. A person skilled in the art would regard it as a normal design to combine D1 and D2 to arrive at the method of claims 10-20. Therefore, claims 10-20 lack an inventive step and do not meet the requirements of PCT Article 33(3).

3. Industrial Applicability

There is no reason to negate the industrial applicability of this invention. Consequently, claims 1 to 20 appear to meet the requirements of PCT Article 33(4).

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 315650.02 WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2007/012573	International filing date (day/month/year) 25 MAY 2007 (25.05.2007)	(Earliest) Priority Date (day/month/year) 01 JUNE 2006 (01.06.2006)
Applicant MICROSOFT CORPORATION		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant.
☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 3
☒ as suggested by the applicant.
☐ because the applicant failed to suggest a figure.
☐ because this figure better characterizes the invention.
b. ☐ none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/012573**A. CLASSIFICATION OF SUBJECT MATTER****G06F 17/00(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 G06F 17/00, G06F 15/62

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Utility models and applications for Utility Models since 1975
Japanese Utility models and applications for Utility Models since 1975Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKIPASS(KIPO) "chart, graph, customization, and conversion"**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5461708 A (KAHN, P. R.) 24 October 1995 See the abstract; figures 1A-1D; column 10, line 13 - column 11, line 35; claims 1-40	1 - 20
Y	US 5581677 A (MYERS, B. A. et al.) 3 December 1996 See the abstract; figure 9; column 11, line 24 - column 13, line 41; claims 1-27	1 - 20
A	US 5414809 A (HOGAN, P. M. et al.) 9 May 1995 See the abstract; figure 12; column 8, line 57 - column 10, line 33; claims 1-20	1 - 20
A	US 6188403 B1 (SACERDOTI, E. D. et al.) 13 February 2001 See the abstract; figure 3; column 5, line 46 - column 6, line 32; claims 1-8	1 - 20



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

27 NOVEMBER 2007 (27.11.2007)

Date of mailing of the international search report

27 NOVEMBER 2007 (27.11.2007)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

YU, Jin Tae

Telephone No. 82-42-481-8542



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2007/012573

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US05461708A	24.10.1995	US5581678A	03.12.1996
US05581677A	03.12.1996	None	
US05414809A	09.05.1995	JP07134765A	23.05.1995
US06188403B1	13.02.2001	AU199859155A1	15.06.1999
		EP01038270A1	27.09.2000
		US6222540BA	24.04.2001
		W09927495A1	03.06.1999